What is literacy?

Literacy for centuries has had a very narrow definition and basically used to identify the ability to read and write in the print medium. In today's global and technologically more advanced environment the concept of literacy has evolved into a more broad notion that includes many more modes (methods) of literacy and contexts (different types) of literacy. The following essay will discuss the concept of literacy, including a brief look at the history, how literacy is addressed in a vocational education environment, theories associated with literacy and numeracy teaching and learning in vocational education and training sector and where literacy is heading in the future.

Defining literacy has in the past been a simple act of assessing the ability in reading and writing, the current information and media rich environment has made defining literacy much more difficult, Lonsdale and McCurry 2004 observed: *The research shows that literacy has no single or universal definition and that its meaning has changed over time from an elementary 'decoding' or written information to a range of more complex and diverse skills and understandings.*

This broader view of literacy and numeracy is evident in recent surveys such as in the 2006 Adult Literacy and Life Skills Survey (ALLS) which endeavoured to measure the level of literacy in five distinct categories; prose literacy, document literacy, numeracy, problem solving and health literacy (AUSTRALIAN BUREAU OF STATISTICS, 2006).
In fact the term literacy has all but been all but replaced with 'literacies' in response to not just this survey but to a general awareness *that competence in reading and*

writing print materials did not automatically transfer to competence in other communication practices. (SNYDER, JONES, LO BIANCO, 2005).

The scope of history of literacy for centuries has been engaged with the ability to read and write in the print medium, this is quite understandable, since written word was the most effective way of storing and retrieving knowledge with the then available technologies chisel/stone, ink/paper moving to ink/printing press. This was a view of literacy as an exercise in coding and decoding of information (HENRY, 2010).

Another aspect of the history of literacy is an understanding of its complex nature that has often been intertwined with the history of social and political development, such as the churches and states roles in controlling literacy by access to text (CLANCHY, 1979) to the printing press invented by Johannes Gutenberg in the 15th Century, which had the ability to mass produce printed media, but did not immediately make the general public literate but simply made the process of becoming literate more accessible (WINSHIP, 2005). This highlights   the theory that it is education that delivers literacy, not simply the accessibility of text (BIRKERTS, 1994).

The definition of literacies has also evolved in the vocational education and training sector with time, during the industrial era it was mainly concerned with trades and its extent was the capabilities of workers being able to communicate manufacturing information and organisational correspondence (LEU, 2000). In today's information era the vocational education and training sector still has an emphasis on the trades and manufacturing but as the nature of these industries has changed, so has the needs of their workers, the internet has made communication and information readily

available to anyone with access, but being able to retrieve useful information from such a massive and diverse (email, webpages, sms, video and audio) data source is a skill that needs to be learned. (KINZER & LEANDER, 2003).

Vocational education and training in Australia has long been funded and until recently, run mainly by government, as such it has had a vested interest in the social and economic impact of adult literacy and numeracy, in particular the costs and benefits to not just its citizens but the economy. (HARTLEY, HORNE, 2006).

In the mid-20th Century, economic theorists devised an explicit connection between learning and prosperity and keyed the term 'human capital'. Human capital is the knowledge that individuals acquire and use to produce goods and services (OECD, 2007). Economies gain from investment in vocational education and training because it results in higher literacy and numeracy levels in its workforce. A workforce with a high literacy and numeracy capability has; greater opportunities for further training, has a higher level of income and sustain longer tenure thus gaining more experience in their job roles and achieving greater productivity. (GLEESON, 2005).

There has been substantial investigation in recent times into whether adult literacy and numeracy produced social capital outcomes, such as changes in interpersonal skills within the student population. Research has found that *80% of the students improved the structure of their networks and the way they communicated, as well as contributing to positive socioeconomic benefits in the areas of education and learning, employment and the quality of working life, and access to goods and services.*(BALATTI, BLACK, FALK, 2006)

Mulitliteracies is a concept that has gained support since the 1990s The New London Group "A Pedagogy of Multiliteracies: Designing Social Futures', where the "multi" refers to both the multiplicity of literacies (for different purposes in different contexts) and the multimodal (different methods/media) aspect of literacy.

Mode of Literacy is a key concept as during the last 2 centuries the advent and accessibility of new technologies has jolted this understanding to view literacy as a more flexible group of skills and strategies than just reading and writing, the multimodal nature of literacy encompasses new communications practices including non-verbal, spoken, print, visual and multimodal communications practices (KALANTZIS, COPE, 2009B & C).

The context and purpose of literacy is the second key concept of multiliteracy, the multiplicity of literacy practices has led many educators to use the plural terms 'literate practices' and 'multiliteracies' to emphasise the phenomena of understanding that there are many different types of literacy such as being mechanical or computer literate, and there is critical thinking and linguistic and cultural diversity. (KALANTZIS, COPE, 2009A).

The concept of multilteracies especially when associated with the use of information and communication technologies (ICT) and new literacy practices (multimodal, asynchronous learning) has immense implications for adult literacy education, with its ability to not only to accelerate and to some degree automate the education process but to offer greater flexibility through its multimodal (multimedia and multi-delivery) nature that is more malleable to different learning styles and its greater accessibility such as via a web based learning management system (LMS) like a Janison or Moodle LMS.(SNYDER, JONES, LO BIANCO, 2005).

These profound changes to the nature of literacy, communication, technology, work and training plus the rapidly changing nature of vocation means that old concept in literacy learning such as rote are no longer an effective method, the 2006 Adult Literacy and Life Skills Survey showed that only six per cent of the surveyed had a high level of problem solving literacy. Problem solving is generally regarded as the most important cognitive activity in everyday and professional contexts but in a classical educational setting, learning to solve problems is too seldom taught. (JONASSEN, 2000).

The future of literacy appears to be a very dynamic process and old methods of learning need to be rigorously investigated if effective and productive learning is going to be achieved. This is of even greater importance in vocational education and training since lifelong learning is crucial, in a future where most adults will have to be retrained multiple times through their professional lives for future jobs that may not even exist now.

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